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Relationship of social characteristics and mass media exposure of Iowa farm women

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RELATIONSHIP OF SOCIAL CHARACTERISTICS AND MASS MEDIA EXPOSURE OF IOWA FARM WOMEN

by

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INTRODUCTION

Among the technical advances of our culture nothing affects man and his culture more than the advances in the field of communication. In this century we have been the recipients of new and different mass communication techniques. The availability of these instantaneous techniques has implications for the manner in which an individual spends his waking hours. The development of radio and television has established a direct contact between the event and the audience, making communication all-pervasive in the life of the nation.

Mass communications serve essentially the same public functions as individual communicators. Mass communications help "watch the horizon" by news bulletins or on-the-scene broadcasts, help us correlate our responses to opportunities, attempt to reach consensus on social issues, help us transmit our culture to others via telstar and other communication satellites, help entertain us, and help economically by advertising merchandise. All of these functions are considered to be necessary in a modern industrial urban society. However, differential access to the media and media use exists between segments of our society. This thesis attempts to examine a narrow segment of the total society (farm wives) to see if differences in exposure patterns exist within this stratum.

Development and Use of Mass Communications

The world-wide impact of mass media, such as wireless transmission of spoken words, is fairly comparable with the Industrial Revolution

(1750-1850) in its effects upon socio-economic and political institutions. The technologies developed at the outset of the 20th century enabled millions to hear, see, and read the same messages at about the same time whereas only hundreds could do it before. The communication revolution is, in the second half of the 20th century, far from complete.

Moveable type, paper, ink, and the handpress are ancient Far Eastern inventions that reached Europe in the 15th century. Laurens Costed, a Holland printer, and Johann Gutenberg, in Germany, applied moveable type to the handpresses about 1450. Soon the new process spread to other countires. America had its first press in the 1630's. After an abortive start in 1690, American newspaper publishing began with the Boston News Letter in 1704 and achieved daily continuity and success in Philadelphia in 1784 with the Pennsylvania Packet and Daily Advertiser (19).

The next big technological advance came with the application of steam power. During the lifetime of James Watt (1736-1819) steam drove the presses of the London Times printing 1,100 copies an hour--an amazing figure at the time. Soon even faster presses printed from type cast in molds. But the type was still set by hand until Ottmar Mergenthaler introduced the first Linotype typesetting machine to commercial use in 1886. Processes were developed to produce low-cost newsprint from wood pulp, replacing paper made by hand from rag stock. By the end of the 19th century, giant paper rolls fed electrically driven rotary presses printing 96,000 copies of a 12 page New York paper in one hour.

Printing served to standardize written communications and spread them everywhere roads, rails, and ships could reach. Its standardizing effects were applied to private communications through the practical development of the typewriter about 1866 (invented in England about 1714). Typewriting and typesetting by machine speeded the process of writing or composing type by hand and rapid printing compressed the time needed to mass-produce written messages and to make them readily available for public distribution in millions of copies. The increased speed and decreasing unit cost of printing from moveable type made production for an enlarged market a commercially attractive proposition.

Schramm (45) states that originally newspapers were only for the educated elite, but with more material available to read it was an incentive to learn to read. Thus the availability of printed materials was closely involved with the growth of public education. Early newspaper publishers found they could sell papers for a penny and still make a profit if they sold enough; and if they sold enough they could also sell advertising and truly "mass" communication was born--prices the common man could pay, large circulation, advertising, and large publishing companies.

The next major advancement in the development of modern communication began with the invention of the telegraph and telephone. Samuel F. Morse patented his invention in 1837 and the first telegraph was built in 1844. Alexander Graham Bell invented the telephone in 1876. In 1885 the American Telephone and Telegraph Company was founded to build long-distant lines and service between New York and Chicago opened in 1892 (19).

Edison's invention of the phonograph, movie camera, and projector made it possible to store moving sights and sounds. In 1906 DeForest's vacuum tube opened the world of radio and television (45).

The printing press produced a product that could be read at leisure with the reader setting his own pace and selecting the copy as he wished. The second wave of communication changed this in that it shifted the initiative from receiver to sender, partly at least. Once the receiver had made his basic choice the sender was in charge, controlling the pace, the emphasis, the timing. The newer machines (radio and television) were faster than the press. They had about them a sense of reality, a sense of immediacy, and an emotional quality that was hard to get into print.

Radio broadcasting came about as a result of the work of Marconi and is based upon the telegraphy inventions made at the end of the 19th century. Marconi sent the first wireless message in 1895. In 1906 the first human voice was transmitted by radio and in 1910 a Caruso performance was broadcast from the Metropolitan Opera House. Commercial broadcasting began after World War I, and coast-to-coast network broadcasting began in the United States in 1927.

Recorded images followed signal and sound in instantaneous transmission when, in 1904, the first wire photo was sent from Munich to Nuremburg. Less than 20 years later pictures were televised between New York and Philadelphia. Regular television broadcasts began over the General Electric station in Schenectady, New York, in 1928. Television became a commercial enterprise after World War II and coast-to-coast

network telecasting began in 1951 with the coaxial cable and microwave relay (18). The number of stations rose from 11 in 1947 to over 730 by 1967, penetrating 9 out of 10 homes. Now satellites permit the beaming of programs to any one or all of thousands of television stations broadcasting in over 100 countries to millions of sets.

This review of the high points of technology in communications was presented to show that these early developments have implications for the way (channel-sender) we receive information, the kind (message) of information we receive from mass media, and selectivity (receiver) of the amount of information we receive via a given channel. During this development society has become somewhat more urbanized and complex. Communications have registered a concomitant development so much an integral part of the process that it can be viewed as both cause and effect. The focus of this thesis is that communication media now offer a wide range of message possibilities and the development of technology and society have made it possible to be selective both in terms of the channel and the message.

Mass Communications and Modern Society

In past years modern society was considered to be made up of masses in the sense that it was composed of a large mass of segregated, isolated individuals. The weakening of traditional bonds and the division of labor helps create a society where individuals are only loosely bound together. As society grows larger and more complex the individual does not have the

ability to identify with and feel himself part of a community with others. The individual may be in a state of psychological isolation from others, but interacts with and is bound to them by contractual ties (16).

The societal structures of today are large and impersonal. However, by means of modern communication involving mass media it is possible for individuals to symbolically interact, even beyond the bonds of the primary group.

"Mass communications may be characterized as public, rapid, and transient" (52 p. 14). They are aimed at a large, heterogeneous, and an anonymous audience; messages are transmitted publicly; and are transient in character. The functions of mass communications may be said to be transmission of news, editorializing or propagandizing, transmission of culture, and entertainment.

The increasing importance of mass communications is evident. Communication is the basis of all social life. The more complex a society becomes the greater the need for precise communication. Years ago life in rural America was simple and the processes of communication were relatively simple. Now we are living in a rapidly expanding society. One problem of a communicator is that of evaluating the potential audience or knowing the behavior patterns of the receivers.

Nearly everywhere conveyance of ideas by means of commonly shared language symbols through personal contact has been augmented by the mass media. It is virtually impossible for a modern American to go through a day without contact with at least one form of mass media, and most participate in all of the various forms during the day.

Mass communications does not act by itself on an individual. Whatever effect mass communications has it will have jointly with other determining forces. The two most important determining forces are the individual's personality resources and his group relationships.

How does the modern mass communicator get the precise information he needs? He turns to communications research to help answer some of the questions which he does not have the time or training to answer.

Current research about the audiences of broadcasting media appears to be of vital importance from the sender's viewpoint for several reasons. First, there is an increase in the number of types of media available to the public and a wider selection of alternative sources within a given medium. Second, there appears to be increasing competition among the media for the attention of the public. Each person is confronted with the alternative of selecting a small fraction of the available output. Third, the number of potential listeners and their fields of experience are continually increasing. And fourth, the value systems seem to be changing somewhat as we evolve to an urbanized society.

Mass communications research which focuses on farm women has been overlooked during the past few years. Many communication studies of farmers were completed prior to the invention of television and often did not include information about the communication patterns of the wife. Exceptions can be found but most research centered on sources of information relative to the adoption of some tangible commodity.

Within a mass communications framework the general objective of this thesis is to study the mass media communications use patterns of Iowa farm women related to their social and economic attributes.

The general objectives are to examine the relationship between:

1. The status-role orientation of farm wives and the amount of time involvement in mass communications;
2. The status-role orientation of farm wives and the type of involvement in mass communications.

More specifically a secondary level examination will be made of the components comprising status-role orientation (five items) and the two variables time (amount) and type (orientation) of exposure to mass communications media.

Both the general and specific objectives are met by testing formal hypotheses of the relationships at the general level with composite measures and at the specific level by relating the individual status-role items to the time and type of mass media exposure.

CONCEPTUAL FRAMEWORK

Introduction

As previously stated, the general objective of this thesis is to explore the mass media use patterns of Iowa farm women in relation to their social and economic attributes. A conceptual framework of the mass communications process will be developed to serve as a guide for the derivation of general level and empirical hypotheses related to this objective.

There is no well formulated, systematic theory of mass communications available for use in this area. Status-role and general mass communications theory will be utilized in an attempt to examine the relationships between selected attributes of Iowa farm women and their mass communications media use patterns. This approach seems justified because of the exploratory nature of the research.

The diverse background from which mass communications developed suggests that a brief overview of approaches to the study of mass communications be given. Following the discussion of the concept of mass communications will be a discussion of a mass communications model. The final section of the chapter will contain the derivation of the general level hypotheses.

Communication Process

It will be easier to see how mass communications works if the

communication process in general is first examined.

Communication is interaction and is usually a two-way process. When we communicate we are trying to establish a "commonness" with someone (46). The extent of the relevant "commonness" possessed by individuals in a situation is largely determined by their social indoctrination.

The number and variety of experiences an individual has while learning to be a social being determines to a significant extent his ability to symbolically interact in a meaningful manner. One function of socialization is that of learning one's status-roles, the institutionalized norms, and the mores and folkways of the parent society. In addition, one develops rather definite systems of attitudes and values which tend to determine his behavior patterns, including habits. Variations in the socialization processes of individuals seem to account for many of the differences in predispositions concerning action, as well as the overt actions themselves.

The notion of patterned behavior is closely related to that of symbolic communication. When a sender desires to produce learning in a receiver it may be necessary to break some existing habit pattern and establish a new one. In this event a reinterpretation of a given stimuli must be strongly encouraged. At other times, the sender may wish to utilize an existing behavior pattern. At still other times, the sender may wish to strengthen a habit pattern which already exists but is underdeveloped. All communication is in some way related to the behavior patterns of the receiver. The ways in which the receiver has been socialized tends to determine the way he responds to certain stimuli. It

is doubtful that in most cases an individual will receive a stimulus unless he has had past experience or a similar experience with it (11).

Mass communications requires at least four elements--the source, the message, the receiver, and the channel. The source is a person or group of persons with the purpose of engaging in communication. The message is the translation of ideas, purposes, and intentions into a code, a systematic set of symbols. The purpose of the source has to be expressed in the form of a message which is capable of being interpreted meaningfully. The receiver is the target of the communication, that is the person or persons at the other end of the communication. And the channel is the medium, or carrier, of messages (7).

Before examining these elements in detail in a mass communications model it may be helpful to see how the concept of "mass" has changed over time.

Mass

In the early days of radio "mass" was used to indicate the body of people of the nation, as contrasted to some special body or group. Lazarsfeld and Kendall (32) use such a definition in their writings. The notion that a herd instinct exists among all men is no longer accepted.

Somewhat later, others (21) perceived the concept of mass differently. They indicated that mass communication is addressed to relatively large, heterogeneous audiences whose members are anonymous. The audience members are physically isolated from one another. During this

phase of mass communications development research was concerned with learning how to enhance desired effects. This was due to the influence of the paying clients who were action oriented and needed empirical answers to their basic questions.

As research developed the flow of information was seen to be much more complicated than earlier models would assume. Both the concepts of a mass audience and the "hypodermic needle communication model" have been subjected to theoretical and empirical challenge (7, 16, 55).

The receivers of mass communications compose many audiences, varying in size, general make-up, extent of participation, purpose of participation, and an array of other features. People do have in common certain basic psychological and physiological drives; but it is oversimplifying to assume, as the "mass audience" notion does, that everyone possesses these drives in equal intensity. Mass communications audiences vary as much in the desires and interests as they do in the physical composition of the individuals who make them up. Some receivers will develop a habit for a particular type of offering and feel that it is to their best interests to continue to read, view, or listen to it. However, O'Hara (40) states that on the whole the audiences are in a constant state of flux and defy accurate characterization in any such term as "mass audience".

Studies of voting behavior showed the mass media audience to be composed of strata, groups, and categories which responded to mass media transmitted information in a variety of ways. The individual may be

anonymous to the communicator but he is not anonymous in his social environment. He is a member of a network of primary and secondary groupings--the family, friends, etc.--which influence him (55). The actual experience of a particular individual member of the audience is decidedly different than might be expected if he were a solitary member of the mass. Usually the individual experiences mass media in sociable settings that are not characterized as anonymous or heterogeneous.

Almost all reference groups play a role in influencing opinions and attitudes. Research conducted on personal influence by Katz and Lazarsfeld (27), Riley and Riley (44), and others, indicates that reference groups affect the way in which an individual is exposed to mass communications as well as the extent to which he can or will modify his behavior in compliance with the message. This implies that an individual selects his mass communications content under much pressure and guidance from his experience as a member of social groups. In fact, his mass communications behavior is part of his social behavior and mass communications have been absorbed into the social life of local groups.

Similar research has revealed that in many cases the audience members are--at the time of exposure--participating in a group experience, for example, the family (55). This assumes that an individual's mass media behavior is closely associated with his various social and economic attributes. This is the general relationship proposed for investigation in this thesis.

Mass Communications Model

Every communication situation differs from all others, yet it is possible to isolate certain common elements. Aristotle indicates that the speaker, the speech, and the hearer are necessary elements for communication. Current models are similar to Aristotle's but are more complex. Elements identified in the communication process models of Berlo (7), Fearing (20), Schramm (46), Westley and MacLean (54), and others are: (1) source or sender, (2) message or sender, (3) channel or medium, and (4) audience or receiver. The differences among these models is partially due to terminology and partially due to the differences in the point of view of the disciplines from which they emerge. In some models a given element is defined as containing several parts while in others such component parts are singled out as additional elements in themselves.

Some of these models (7, 46) include a function of encoding and decoding. Some models (16, 42, 46, 54) include feedback, and some models (8, 14) add noise.

The mass communications model used in this thesis contains the four basic elements above. The next four sections of this chapter will deal in more detail with these concepts. Since the concern of this thesis is primarily the relationship between an individual's social and economic attributes and their use of radio, television, and reading of newspapers, magazines, and books, more attention will be focused on the receiver and message than on the sender and media. The procedure of discussing the

concepts separately is employed for convenience of presentation. At no time should the four concepts be considered as independent in themselves, but rather should be considered as four interrelated parts of a whole.

Sender

In a mass communications framework the sender is a person or group of persons with the purpose of engaging in communication.

In producing a message for communication the sender usually has assumptions about the interests, desires, and attributes of the audience he wants to reach. The sender plans the communication in terms of these assumptions about the receiver and his interests.

The conditions for the sender of mass communications differs from those in face-to-face interaction. In the latter, the sender can design a message according to the receiver's perceived attitude and value framework. With immediate feedback from the receiver, the sender can immediately modify his message for greater effectiveness. In a mass communications situation feedback is not immediate and it is not possible to decide to alter a message during delivery.

In using mass media the sender must be aware that the receiver may accept or reject the stimuli. The psychological frames of reference of the receiver and social structures operate to screen and select the available message content. The mass communicator is challenged to develop more complex skills of role taking in terms of understanding the various subcultures, mores, folkways, language habits, etc. of the audience with which he is dealing (16, 30).

Because of the time factor necessary for feedback to take place and it's questionable reliability and validity the sender may need to become aware of his intended receiver's social and economic characteristics. Such information may be useful to him in predicting the mass media use patterns of the intended receivers.

Message

The message in mass media is the translation of ideas, purposes, and intentions into a systematic set of symbols transmitted by a sender to a receiver by means of impersonal media.

Lazarsfeld and Stanton (33) indicated in their research that certain kinds of people listened more to one type of program while other individuals preferred other types. Separating the various programs into meaningful, mutually exclusive, and exhaustive categories is difficult. A given radio or television program is received in about as many different ways as there are individuals hearing it. It does seem of analytic value to attempt delineating program types. This procedure is arbitrary but it is believed that most, although not all, program overlap can be eliminated.

All programs are classified into two broad types: entertainment and information-orientation. Entertainment programs are the types of programs people generally listen to for amusement purposes. Entertainment programs include general drama, westerns, comedy drama, variety, quiz contests, and crime drama. Information-orientation programs are the types of programs generally listen to for information or orientation to their style of life. They include topics on arts, crafts, cooking,

science, shopping, travel, public events, public issues, religion, personal relations, and public institutional programs (55). Attempts to classify advertising are usually centered on effectiveness not on the type of advertising, and no attempt will be made to classify advertising.

Media

The media is the carrier of messages making possible the connection of the sender to a large number of receivers who are beyond the space and time range of face-to-face interaction. Mass media are generally classified as being electronic and printed. This thesis is concerned with the media of radio, television, and reading of newspapers, magazines, and books.

According to Schramm (46) the decision concerning when to use the media to maximize effective and efficient communication is one which the sender as well as the receiver must make. Certain listeners will listen to radio or watch television for a greater amount of time than others.

The media use decisions are quite complex for the sender. Several factors need to be considered before the sender comes to a conclusion. Two of the factors Schramm suggests are: "What is the relative availability of the channels to the communicator? What use is the audience accustomed to make of the different channels, . . . " (48 p. 87).

The availability of mass media in the home is a requisite for use. But the presence of a radio or television set does not guarantee that it will be heard or watched.

The amount of time individuals devote to receiving mass media

messages involves two types of decisions. One concerns whether or not to use the media or to do something else. The second centers on selectivity after the decision has been made. Many factors enter into this decision; however there may be certain common characteristics associated with specific programs. The sender implicitly makes this assumption when specific programs are selected to advertise certain products.

Receiver

The receiver is the target of the communication, that is the person or persons at the other end of the communication. In this study the receivers are the farmers' wives who listened to radio or watched television.

The receiver has a purpose in mind when he initiates communication. The purpose for involvement must be understood or anticipated by the message sender, as what the receiver listens to will reflect his (the receiver's) purpose.

Elaborating on the importance of the receiver, Berlo states:

> When we write, it is the reader who is important, when we speak, it is the listener who is important. This concern with the receiver is a guiding principle for any communication source. The receiver always has to be kept in mind when the source makes decisions with respect to each of the communication factors.
>
> When the source chooses a code for his message, he must choose one which is known to his receiver. When the source selects content in order to reflect his purpose, he selects content that will be meaningful to his receiver. When he treats the message in any way, part of this treatment is determined by his analysis of his receiver's communication (decoding) skills, his attitudes, his knowledge, and his place in a social-cultural context. The only justification for the

> existence of a source, for the occurrence of communication is the receiver, the target at whom everything is aimed (7 p. 52).

It is almost impossible for the average person to go through a day without contact with some form of mass media. Most people participate in all forms of mass media communications during the day. Research evidence indicates that the average American spends nearly 70 percent of his active hours communicating verbally, listening, speaking, reading, and writing. This involves as much as 10 to 11 hours a day per person. Various radio and television surveys indicate an individual usually devotes approximately one-half of the 10 to 11 hours to receiving messages from these two media (7, 40).

Schramm points out (46) that the decision-making process involved in program selection is quite complex. First the individual must decide among alternative uses of time. If the individual decides upon mass media, he still has to decide what source to use and which message to receive. The degree of complexity of the decision-making process will vary from individual to individual as well as for each individual in various situations.

In many situations, the availability of mass communications is the major determining factor in the decision-making process to receive a message (16, 30). However, one's interests and needs may determine if he will make himself available to receive a given mass communications message at a given time. Therefore, the socio-economic attributes of an individual are related to the availability and content of the messages he receives. Socio-economic status is the position an individual

holds on the basis of possessing certain institutional symbols--such as age, income, sex, occupation--and other objects which may be observed and evaluated by others.

Summary

Little current empirical evidence is available to support predictions concerning attributes of individuals (especially farmers) and their mass media use patterns as they will be operationalized in this thesis. The sender, message, medium, and receiver of any communication situation need to be considered as interrelated aspects of a process rather than as individual entities. Due to the interrelatedness of the various aspects of the mass communications process it is necessary to include them all in the formulation of a communication framework, even though major emphasis of the research only focuses on a single part. In this thesis the focus is on the receiver and the message.

Information concerning the characteristics of the receiver seems to be of greater necessity in mass communications situations than in face-to-face communication because of the potential number involved and the lack of direct feedback to the sender. The sender's awareness of the intended receivers' behavior patterns and other related attributes is of major importance for effective and efficient communication to take place via mass media.

Status-role Orientation

Man is a social being dependent upon others. Because each man

requires other individuals to relate to him in order to satisfy certain needs and to reach certain goals, multiperson social systems involving the organized behavior of such interdependent persons arise. It is only through symbolic communication that human relationships are possible.

The individual plays a part in determining the activity of the social system; and, to a significant extent, the system determines the behavior patterns of the individual. Social systems affect not only the how, why, to and from whom communication occurs, but also the effect.

A social system possesses a somewhat established set of relationships among the members which is referred to as its structure. Each social structure consists of various related positions or statuses. Every individual or group has a social position or identifiable point of location in the organizational pattern of a particular system. This position in the scheme of social relationships is known as "status".

In a communication situation the prestige of the sender is important. Usually a receiver will interpret more favorably information which is received from a high prestige sender. When a receiver has a choice of several senders, it would seem he would select the one with the most favorable image if content is not the criterion of selection. A communicator might anticipate that messages identical in content could have a differential effect in accordance with the receiver's image of the sender. It would seem that when a receiver has a choice of several senders, he would select the one of which he has the most favorable image.

Along with the voluntary social structures in which one's status is achieved there are structures categorized by society in which an

individual is categorized by society regardless of his desire to be so placed. Positions in these structures occupied without choice are known as ascribed. Such attributes as age and sex are determined for the individual. One's income is usually viewed as achieved, although at times it is ascribed. Achieved and ascribed attributes are instrumental in determining one's social relationships, that is, his behavior patterns.

Each of the positions or statuses of a social system carry with it a set of socio-culturally patterned and established acts which the holders of the position are expected, or even required, to perform. This pattern of expected behavior is known as a "role". The status related role reflects the values, attitudes, and beliefs held by the participants of the system. Therefore, it is within the status-role framework that an individual's attributes indirectly determine the behavior expected of him. The receiver's social status, group memberships, and customary modes of behavior will affect message interpretation. As a result of socialization the individual develops an awareness of and learns his social systems' behavioral expectations of him.

The social structure, by means of an individual's status-role, limits the number and range of receivers with whom he may interact and may partly determine the context in which interaction takes place. Berlo stresses this point by stating: "One's position in a social system (as determined by his attributes) is related to his communication behavior" (7 p. 135). The structure also determines to a certain extent the content of the messages an individual transmits, receives, and to whom he transmits, in view of the status he occupies. Due to social pressures

one tends to avoid message content that is not appropriate to his own role, unless he is purposely trying to change to another status-role.

In addition to determining the behavior of the person filling a given status-role, the social system provides means to enforce role conformity. Through social pressure, positive and negative sanctions, the social system encourages role behavior that is expected by the system. This could mean that individuals who do not keep up-to-date on certain radio or television programs might be left out of the conversation of their friends or associates who discuss such topics.

Social systems determine the frequency with which messages are sent and received for any given individual of the system. Some status-roles are designed so that the individual filling them will be expected to have contact with a large variety of information sources in order to be knowledgeable about events. There are also status-roles which inhibit communication for the persons involved by restricting them from interaction with certain segments of the society. Role definitions in such cases generally indicate when, where, why, and how the individual should be a receiver and sender of information.

Although the preceding discussion focused primarily on a single social system, almost every individual identifies with and participates in status sets. Being able to predice mass communications behavior may depend on the status-sets an individual has.

In this thesis the analysis of status takes into account wealth, age, size of family, and education.

Wealth often has been the criterion used to place individuals into status-roles. Perhaps this is because wealth is one of the most visible dimensions to measure. In a farming community the two greatest indicators of wealth are income and farm size. In rural society the operation of the farm and the attendant status in the community is often considered to be a matter of joint status of both parties to a marriage. A farm is operated by a family and it is not unusual for the widow to continue operating the farm with the help of a son or hired man.

In contrast, education in increasingly urbanized societies is rarely accorded a place as a main criterion of rank. This would appear to be a serious defect because education seems to be increasingly used as a major criterion of ranking and also an important means by which a person may change his achieved statuses. Emphasis on education is not novel. Weber, commonly credited with three stratification criteria--wealth, power, and honor--considered education several times in his discussions of social stratification (53).

In our society age grading does not involve formal age categorization, but is interwoven with other structural elements. The equality of privileges and responsibilities, graded only by age, is extended to a certain degree throughout the range of the life cycle. At emergence into adolescence there begins to develop a set of patterns and behavior which involves a complex combination of age grading and sex role elements (41). The transition to full adulthood means participation in a different set of prestige symbols. Although adulthood represents one status-role within a more general structure, it is apparent that

individuals distinguish among various stages of adulthood.

All known societies have some provisions for a family structure. Among the functions associated with it is status ascription. The status-role in regard to the family can be considered from two levels. One involves the various positions and the related expected behavior within the family. The other encompasses a heirarchy of families with some occupying more highly prized social positions than others. Hollingshead and associates (23) found, as have others, in their analysis of Elmtown a relationship between family size and social stratification. Families that were considered to be occupying the lower prestige position of the structure tended to be larger in size than those in the more highly favored positions.

Reading is a social process. According to Waples, Berelson, and Bradshaw (51) reading relates the reader to his environment and conditions that relationship. To some aspects of the environment the reader has a primary relationship, that is he is in direct physical contact with it. To other aspects of the environment he holds a secondary relationship, that is he establishes contact only through symbols. Both sets of relationships make up his experience. Through reading the individual may extend his secondary relationships with the environment; and these relationships may do as much to condition him and make him what he is as do his primary relationships. The extension of popular education, the improvements of communication methods, and the rapid increase in the scope of public communications are certain to increase the importance of such symbolic experience. In this context, reading is one channel among

several through which the environment affects the individual.

Both the content of the publication and the reader's predispositions operate to determine not only whether a person reads at all but also what he reads. Not only the status of reading but also the nature of what is read is affected by current social attitudes.

Reading behavior and reading interests are conditioned by such traits as the sex, age, education, and occupation of the readers (51).

The act of reading carries a prestige component in American life. Important childhood rewards, both from parents and teachers, are occasioned by success in reading. Therefore, the act has pleasant associations. The people of this country support libraries to promote the practice of reading as well as giving considerable deference to the "well-read" man. The act of reading is connected with such approved symbols as "education" or "intellectuality" and takes on its own aura of value (5).

In view of the above discussion, it is logical to propose that an individual's status-role is related to his use of radio, television, and reading of newspapers, magazines, and books. The general hypotheses will be formulated at the end of this chapter and will be derived from the theoretical orientation that exposure to mass media is related to certain environmental characteristics; mainly that certain socio-demographic characteristics make up part of an individual's status-role orientation and that this status-role orientation in turn will be associated with both the type and amount of mass media exposure to which an individual

exposes himself. This general orientation has been extended to farm wives to see if this relationship holds for females as well.

Derivation of Hypotheses

This thesis will use status-role orientation as the predictor variable. The two concepts to be related to this stem from the general conception of mass communications media use patterns and they are: amount of time devoted to receiving messages and the types of programs (messages) received.

As stated above, man occupies status-roles in many social systems. These social systems affect how, why, to whom, and from whom communication occurs and the effect of that communication (7). This is to say that the amount of time an individual uses mass communications media is dependent on his status-role. Therefore, based on the theoretical orientation it would seem valid to expect definite relationships between the various attributes of an individual and the amount of time he spends receiving messages from mass communications media. In view of this, the first general hypothesis will be proposed as follows:

> General Hypothesis 1: There will be a relationship between status-role orientation and the amount of time spent receiving messages from mass communications media.

All social systems in which an individual has a status-role possess a set of values. These values determine the life style of the group.

As well as defining when and for how long an individual may use a mass medium, the status-roles in part determine what he will receive. An

individual's position may demand that he be knowledgeable about certain programs, or his position may influence his interest in certain types of programs. It would seem valid to expect definite relationships between the various attributes of an individual and the types of messages received from mass communications media. The second general hypothesis is as follows:

> General Hypothesis 2: There will be a relationship between status-role orientation and the type of messages received from mass communications media.

These two general hypotheses will serve as the guide for the derivation of the empirical hypotheses. Each will be presented and tested in the Analysis of Data chapter.

METHODOLOGY

Introduction

The previous chapter included the development of a conceptual framework. Attention now turns to the empirical level of conception where specific relationships will be tested. From these tests, inferences will be made concerning the general level statement of relationships.

Having derived the general hypotheses to be tested the discussion will now focus upon the methods and procedures employed to collect the data and to test the hypotheses.

The first section of this chapter will be concerned with the methods and procedures involved in the collection of data. The second section will be devoted to the development of the empirical measures designed to operationalize the theoretical concepts. The final section will be concerned with the development of empirical level hypotheses.

Method and Procedure

The data used in this thesis are part of the data collected for the Iowa State University Agricultural Experiment Station project 400-30-01-09-59 and the Iowa State University Agricultural Extension Service project 103-30-60-60-59. The study was conducted in cooperation with the Iowa State University Information Service and the Iowa Farm Bureau Federation.

The combined objectives of the original research projects were to:

1. Determine the salient personal, social, and economic characteristics of the potential married adult farm radio and television audience of Iowa.
2. Determine the radio listening and television viewing patterns of the sample members.
3. Determine the degree to which radio station broadcasts are used as a source of information by sample members in making selected business decisions.

Sample

The basic data appearing in this thesis were obtained from personal interviews with Iowa farmers and their wives. Other information was summarized from radio listening charts on which each of the farmers and their families had recorded their listening patterns for a continuous two-day period (4). The interviewing was completed during late March and early April 1961.

Farm couples were interviewed in the seven Iowa counties of Adair, Bremer, Carroll, Keokuk, Marshall, Palo Alto, and Wright. To be included in the sample the farm family had to consist of at least a farmer and his wife living together in the farm home and operating a minimum of 40 acres of crop land. There had to be a radio receiver on the farm which could be in the house, outside buildings, automobile or truck, or on a tractor.

The counties were selected on the following criteria:

1. The county must be within the primary listening zone of radio station WOI, located on the Iowa State University campus. This criterion eliminated the outside tiers of counties.
2. A county was selected to represent the Northwest, West central, Southwest, North central, Northeast, East central, and Southeast areas of Iowa and tended to correspond to the major economic areas of Iowa.
3. The presence or absence of a "local" radio station in the county was considered. Of the counties selected, three had radio stations with programming primarily oriented to meet the needs of the county in which they were located. However, each of the seven counties were within the primary listening zone of at least one "regional" and a "state-wide" broadcasting station.

Twenty-one farm families were selected from each of the seven counties by means of random sampling procedures. The fixed number of 21 families from each county represented approximately the same percentage of the total farms in each of the sample counties.

Field procedure

The interviewing procedure involved a two-stage process. The farm families were initially contacted to determine if they qualified on the criteria mentioned above. If they qualified, each family was asked to keep an accurate record of all their radio listening and television viewing during a designated 48 hour period. A chart was provided for

each radio and television set. On these charts each farm family was asked to identify each member of the family who listened to radio or viewed television, the stations to which they were tuned, and the specific times the listening or viewing was done. These records were kept by 15-minute intervals during the two-day recording period.

The data collection process was structured so that three of the 21 farm families in a given county had the same two-day period. Three families recorded data on a Monday and Tuesday, three families recorded on Tuesday and Wednesday, three on Wednesday and Thursday, and so forth, throughout the week. A statistical random sampling procedure was used to determine the specific farmer-day combinations.

The first stage of the interviewing process was concluded by establishing a time for the interviewer to return to the farm. On the return visit the interviewer administered detailed and separate interview schedules to each farmer and his wife. Also, at this time the radio-listening and television-viewing charts were collected.

A form containing the dates and times of radio programs on a given station was sent to the manager of each station involved with a request for him to indicate the titles of the programs broadcast during the specified time periods. A list of program types was included and the station manager was asked to identify each program by type. Similar information was obtained for television programs by analysing each station's daily schedule as published in the newspaper.

Although information was obtained from both the farmers and their wives, the data in this thesis pertain only to the wives.

Statistical tests and procedure

The field of statistics has developed to the extent that there are now available for almost all research designs alternative statistical tests which might be used in order to come to a decision about a hypothesis. Some rational must be employed in making the final decision on the test statistic.

Along with the power of a statistical analysis the rationale used to determine which test is most appropriate for analyzing a particular set of data must involve the manner in which the sample of scores was drawn. In addition, it must consider the nature of the population from which the sample was drawn and the kind of scaling which was employed in the operational definitions of the variables. As indicated by Warren (52), the assumptions which must be satisfied to utilize parametric statistics are:

1. The observations should be independent. The selection of one case for inclusion in the sample must not bias the chances of any other case for inclusion.
2. The observations must be drawn from a normally distributed population.
3. The populations should have the same variance.
4. The variables involved should be measured in an interval scale so that it is possible to use arithmetic operations on the scores.

It is believed that the research data in this thesis are suitable for testing by means of a parametric statistic, the Pearsonian product

moment coefficient, in that the assumptions for its use appear to have been satisfied.

Operational Definitions

An important phase of any research study is transforming the theoretical level concepts utilized in hypotheses at that level into explicit empirical terms so that testing is possible. Failure to clearly distinguish purely empirically given meanings from the theoretically proposed meanings can introduce confusion. The importance of operational definitions is that they make verification possible (39).

In this thesis examination of the relationship between status-role orientation and the amount of time spent receiving mass media communications and the types of programs received will be made. In order to test the variables operational definitions will be made in the following three sub-sections of this chapter.

Amount of time

The daily minutes of exposure to mass media messages is an index of the amount of time devoted to receiving such messages. It is assumed that the number of minutes per day of exposure is an indication of the amount of time an individual actually receives messages from mass communication media.

Daily minutes of exposure to mass media messages was obtained by adding the total number of minutes of radio listening, total number of minutes of television viewing, and total amount of time spent reading

newspapers, magazines, and books. It has been hypothesized that status-role orientation will be associated with the total score of exposure to mass communication media.

The characteristics of minutes spent listening to the radio, watching television, and reading of newspapers, magazines, and books are reflected in Tables 1 through 5.

Table 1. Minutes of radio listening per two day period

Minutes	Number	Percent
861 minutes and over	4	2.7
609 - 860 minutes	19	12.9
357 - 608 minutes	42	28.6
104 - 356 minutes	64	43.6
1 - 103 minutes	10	6.8
0 minutes	8	5.4
Total	147	100.0

Mean = 356.72 minutes
Range = 0 - 1395 minutes

Tables 1, 2, 4, and 5 contain less than six categories because the method of forming the scale as described on page 42 would give a category of minus minutes.

Table 2. Minutes of television viewing per two day period

Minutes	Number	Percent
1032 minutes and over	9	6.1
715 - 1031 minutes	13	8.8
399 - 714 minutes	38	25.9
82 - 398 minutes	64	43.6
1 - 81 minutes	5	3.4
0 minutes	18	12.2
Total	147	100.0

Mean = 397.45 minutes
Range = 0 - 1365 minutes

Table 3. Minutes of newspaper reading per week

Minutes	Number	Percent
660 minutes and over	3	2.0
480 - 659 minutes	6	4.1
300 - 479 minutes	42	28.6
120 - 299 minutes	47	32.0
30 - 119 minutes	45	30.6
1 - 118 minutes	0	0.0
0 minutes	4	2.7
Total	147	100.0

Mean = 299.8 minutes
Range = 0 - 1260 minutes

Table 4. Minutes of magazine reading per week

Minutes	Number	Percent
540 minutes and over	6	4.1
360 - 539 minutes	17	11.5
240 - 359 minutes	27	18.4
60 - 239 minutes	88	59.9
1 - 238 minutes	0	0.0
0 minutes	9	6.1
Total	147	100.0

Mean = 240.27 minutes
Range = 0 - 840 minutes

Table 5. Minutes of book reading per week

Minutes	Number	Percent
167 minutes and over	16	10.9
120 - 166 minutes	7	4.8
72 - 119 minutes	1	.7
26 - 71 minutes	17	11.5
1 - 25 minutes	0	0.0
0 minutes	106	72.1
Total	147	100.0

Mean = 72.04 minutes
Range = 0 - 1260 minutes

Type of program

Each of us is surrounded by many more messages than he can receive. Will an individual tune his radio set to a certain station at a certain time? Will he pay attention to the message? The kind of mass media messages an individual receives is indicated by the types of programs he listens to or watches. The type of program received is operationally defined by computation of a ratio. Each of the two components of the ratio is briefly presented.

Entertainment The principal effect of many media lies in their entertainment value for the audience. Entertainment in this thesis includes such programs as general drama, westerns, comedy drama, variety, quiz contests, and crime drama.

Entertainment was operationalized by adding the minutes spent receiving entertainment programs from both radio and television. The characteristics of minutes spent listening to entertainment type programs is reflected in Table 6.

Table 6 contains less than six categories because the method of forming the scale as described on page 42 would give a category of minus minutes.

Table 6. Minutes of entertainment listening per two day period

Minutes	Number	Percent
1204 minutes and over	6	4.1
870 - 1203 minutes	14	9.5
536 - 869 minutes	45	30.6
203 - 535 minutes	58	39.5
1 - 202 minutes	24	16.3
Total	147	100.0

Mean = 536.16 minutes
Range = 15 - 1965 minutes

Information-orientation Almost all of our knowledge of the world in which we live and of daily evidence is derived from mass media. Therefore, one of the most obvious effects of mass media is to be found

Table 7. Minutes of information-orientation listening per two day period

Minutes	Number	Percent
464 minutes and over	7	4.8
339 - 463 minutes	19	12.9
213 - 338 minutes	35	23.8
92 - 212 minutes	61	41.5
1 - 91 minutes	23	15.6
0 minutes	2	1.4
Total	147	100.0

Mean = 213.03 minutes
Range = 0 - 575 minutes

in the transmission of information. The information-orientation category includes public events, public issues, religion, personal relations, public institutional programs, arts, crafts, cooking, science, shopping and travel.

Information-orientation was operationalized by adding the minutes spent receiving information-orientation programs from both radio and television. The characteristics of minutes spent listening to information-orientation type programs is reflected in Table 7.

Entertainment/information-orientation ratio An individual may spend a greater amount of time receiving one type of program rather than another. Therefore, a ratio of time spent receiving entertainment and information-orientation was developed by dividing the minutes of receiving entertainment programs by the minutes of receiving information-

Table 8. Ratio of entertainment/information-orientation listening per two day period

Minutes	Number	Percent
99 minutes and over	8	5.4
74 - 99 minutes	4	2.7
48 - 73 minutes	16	10.9
23 - 47 minutes	53	36.1
1 - 22 minutes	66	44.9
0 minutes	0	0.0
Total	147	100.0

Mean = 48.3 minutes
Range = 3 - 1500 minutes

orientation programs. The resulting score continues to maintain the element of program type, which would be lost by merely adding the amount of time spent viewing each type of media. The characteristics of the ratio of entertainment/information-orientation listening is reflected in Table 8.

Status-role

Whenever people associate over a long period of time they tend to rate each other on the basis of things considered important. The evaluation may be on what they say or do or on whether they possess generally valued attributes and characteristics (in terms of local expectations). In a sense, persons are placed in a high-low hierarchy on the basis of what they have or do not have, or on the basis of how much they have or do not have of what is considered valuable. People in farming communities have a way of combining farm ownership, education, neighborliness, etc. in their own way to rate the people they know on a high to low continuum. Thus high income, ownership of a big farm, and high educational attainment tend to be prized possessions.

Status-role was previously defined as the identifiable point of location of an individual in the organizational pattern of a particular system and the expected behavior associated with that position. Each individual is a member of various social systems and, therefore, occupies a number of status-roles.

Status-role is operationally defined by five indices. Each is discussed in detail in the following section. In attempting to arrive at a score for status-role orientation there is no absolute measure of the

importance of one of the status-role indices over another. There is not enough evidence to allow weights being assigned to one status-role index as against another. It was decided that the best procedure was to develop a six point scale for each index and then add the five six point scales together to form a status-role orientation score for each individual (14).

The six point scale was developed by finding the mean for each index. One standard deviation larger than the mean was given a score of 4, two standard deviations larger than the mean were given a score of 5. If any number was larger than two standard deviations from the mean it was given a score of 6. One standard deviation less than the mean was given a score of 3, two standard deviations less than the mean were given a score of 2, and any number lower than two standard deviations was given a score of 1. If any individual had an absolute zero on a characteristic a score of 0 was assigned. For example, farm size is one of the indices used to build the status-role orientation scale. The average total acres was 229 and the standard deviation was 96 acres. Using the procedure described above, the following scale was developed for total number of acres operated:

423+ = 6
326 - 422 = 5
229 - 325 = 4
132 - 228 = 3
35 - 131 = 2
0 - 34 = 1

This method was used to develop a score for each of the indices. By using this method it is possible at a later date to experiment with various arbitrary weightings (14).

Farm size The size of the farm operated is a measure of the operator's status-role (36). Farm size indicates the relative size of the

Table 9. Farm size by respondent

Acres	Number	Percent
423 acres and over	6	4.1
326 - 422 acres	12	8.2
299 - 325 acres	53	36.2
132 - 288 acres	58	39.2
35 - 131 acres	18	12.3
Total	147	100.0

Mean = 229 acres
Range = 76 - 648 acres

farming operation, and may reflect certain management problems and interests of a farm family. Farm size was operationalized by ascertaining how many acres a farm family operated. The characteristics of farm size by respondent are reflected in Table 9.

It is not possible to have a category of 0 - 34 acres as one criterion for inclusion in the sample was operation of at least 40 acres.

Gross income Prior studies (13, 35) have used income as a measure of status. Gross farm income is an indication of the size of the farming operation, the assets of a farm family, and an important factor in determining the position one occupies in a social system.

Gross farm income was operationalized in the interview schedule by an index which consisted of various categories of gross income a farmer might achieve. From 0 to 9,999 dollars each category had a range of 1,000 dollars, from 10,000 to 34,999 each category had a range of 5,000 dollars, and there was a category of 35,000 dollars and over. If a farmer had an

Table 10. Gross income by respondent

Gross income	Number	Percent
34,000 and over	7	4.8
30,000 - 34,999	4	2.7
25,000 - 29,999	3	2.0
20,000 - 24,999	12	8.2
15,000 - 19,999	26	17.7
10,000 - 14,999	30	20.4
9,000 - 9,999	10	6.8
8,000 - 8,999	7	4.8
7,000 - 7,999	9	6.1
6,000 - 6,999	6	4.1
5,000 - 5,999	11	7.5
4,000 - 4,999	7	4.8
3,000 - 3,999	4	2.7
2,000 - 2,999	4	2.7
1,000 - 1,999	3	2.0
Under 1,000	0	0.0
No answer	4	2.7
Total	147	100.0

Interval Mean = $7,976
Range = $1,000 - $60,000

income of over 35,000 dollars he was asked to estimate his income to the nearest 5,000 dollars. The characteristics of gross income by respondent are reflected in Table 10.

Using the procedure described on page 42, the gross income categories were collapsed to a six point scale. This collapsed gross income is reflected in Table 11. The four "no answer" respondents were treated as having a mean income to take advantage of the data on their schedules.

Table 11. Gross income by respondent (collapsed)

Gross income	Number	Percent
20,000 and over	26	17.7
15,000 - 19,999	26	17.7
10,000 - 14,999	30	20.4
6,000 - 9,999	36	24.5
3,000 - 5,999	22	15.0
0 - 2,999	7	4.7
Total	147	100.0

Interval Mean = $7,976
Range = $1,000 - $60,000

Age All societies recognize age as a basis of status, but some of them emphasize it more than others (15). Most societies have an age classification system. Whatever system is used it will be found that the categories which it establishes are ranked in a prestige series (34, 41).

All societies recognize differences in role and status related to age. The biological factors involved appear to be secondary to the cultural ones in determining the content of statuses (15).

Adulthood represents one status-role in a general structure. But also individuals distinguish among various stages of adulthood. It is suggested that members of a social system would expect a greater degree of conformity to the expectations of a given status-role from those who have occupied it for a period of time. Generally chronological age is a measure of status-role, reflecting the degree of experience in various

areas of society. Age was operationalized by asking each farm wife to indicate her present age. The characteristics of age by respondent are reflected in Table 12.

Table 12. Age by respondent

Age	Number	Percent
68 years and over	2	1.4
55 - 68 years	31	21.1
44 - 55 years	34	23.1
32 - 44 years	29	19.7
20 - 32 years	51	34.7
0 - 20 years	0	0.0
Total	147	100.0

Mean = 44 years
Range = 20 - 68 years

Family size Number of people residing together is a measure of status-role (13, 23). There is a relationship between family size and social stratification. Families considered to be in a lower prestige position tend to be larger in size than those in more highly favored positions. Closely associated with a family in a given status position is an expected conformity to the norms as encouraged by various social and economic pressures.

Family size was operationalized by ascertaining how many children under 20 the farm couple had, how many children over 20 resided at home,

and how many "others" resided with the farm family. The characteristics of family size by respondent are reflected in Table 13.

Table 13. Number of people residing together by respondent.

Number of people	Number	Percent
9 and over	6	4.2
7 - 8	8	5.5
5 - 6	34	23.1
4	33	22.4
3	33	22.4
2	33	22.4
Total	147	100.0

Mean = 4.03 people
Range = 2 - 12 people

It is impossible to have a unit of less than two people as one criterion for inclusion in the sample was at least a farmer and his wife living together in the farm home.

Level of education Several studies (3, 13, 17, 35) use level of education as a measure of status. People in higher status positions tend to have more education than those in a less favored prestige position. Years of formal schooling may be used as a predictor of the media and types of messages that individuals tend to seek out. Therefore, it is expected that those with a similar number of years of formal schooling will have somewhat similar interests.

Level of education was operationalized by asking each farm wife how many years of formal schooling she had. The characteristics of formal education by respondent are reflected in Table 14.

Table 14. Formal education by respondent

Years of education	Number	Percent
16 years and over	4	2.7
13 - 15 years	30	20.4
11 - 12 years	70	47.6
9 - 10 years	13	8.8
7 - 8 years	29	19.7
0 - 6 years	1	.8
Total	147	100.0

Mean = 11.4 years
Range = 6 - 17 years

The five indices of farm size, gross income, age, family size, and education summed together comprise what has been termed an individual's status-role orientation. The summated status-role score will be correlated with the variables of amount of time involved in receiving mass media communications and type of messages received.

Each of the five indices of status-role orientation then will be associated separately with amount of time involved in receiving mass media communications and the type of messages received to determine what, if any, influence each index has on each of the two variables (time and type).

Derivation of Empirical Hypotheses

As previously stated, the general objective of this thesis is to explore the relationship between mass media use patterns and social and economic attributes of females residing on farms. Based on the theoretical framework it appears valid to expect the various attributes of an individual to be related to the amount of time he spends receiving messages from mass communication media. Therefore, the following general hypotheses and empirical hypotheses are formulated. Throughout this thesis the letters E.H. will be used to represent the words empirical hypothesis.

For statistical purposes, hypotheses should be stated in the null form and rejected or not rejected in that form and that rejection or acceptance should be related to the original proposition. This was done for each of the empirical hypotheses. However, only the two general hypotheses and the attendant empirical hypotheses will be presented in this section. Hypotheses presented in the null form are presented in the Findings chapter with appropriate data to test each.

General Hypothesis 1: There will be a relationship between status-role orientation and the amount of time spent receiving messages from mass communication media.

As previously discussed, status-role orientation is measured by summing the five indices of farm size, gross income, age, family size, and education. The summated score of the transformed scale will be combined with the variable total amount of time to formulate empirical hypothesis 1 as follows:

Status-role orientation - time exposure to mass media

E.H. 1: The status-role orientation (composite score) will be related to the daily minutes of time spent receiving mass communication media messages.

The body of theory does not give sufficient information to allow prediction of direction.

In addition each of the five status-role orientation indices was associated with the variable total amount of time to formulate five empirical hypotheses.

Farm size

A large farm generally requires more time spent in management and operation, leaving less time available to receive mass communications. However, it is essential that time be spent in reading, listening to the radio, or viewing television to receive the latest information on markets, technology, and entertainment. The burden of obtaining information for the farmer may fall upon the wife. However, for large efficient farm management, market reports and technical reports constitute a small portion of the total media being sent. This relationship will be examined in empirical hypothesis 2. The body of theory does not give sufficient information to allow prediction of direction.

E.H. 2: Number of acres operated will be related to the daily minutes of time spent receiving mass communication media messages.

Gross income

Schramm (48) states that media use increased with economic status and that a person who uses one medium more than average tends to use all media more than average. The status-role orientation of a farm wife in a given social system may dictate that she be knowledgeable in regard to agriculture and other matters, making it necessary for her to spend more time receiving mass media. However, wives of farmers with a large gross income may have other activities necessary to maintain status in the community. Time spent in these other activities will lessen the amount of time available for receiving mass communications messages. This relationship will be examined in empirical hypothesis 3. The body of theory does not give sufficient information to allow prediction of direction.

E.H. 3: Gross income will be related to the daily minutes of time spent receiving mass communication media messages.

Age

Cauter and Downham (14) and Schramm (48) indicate that mass media use increased with age. Younger women have children and other duties preventing them from watching television or reading. However, radio listening does not require the attention that reading and television require. Therefore, the overall measure may not be affected. This relationship will be examined in empirical hypothesis 4. The body of theory does not give sufficient information to allow prediction of direction.

E.H. 4: Age will be related to the daily minutes of time spent receiving mass communication media messages.

Family size

Berelson and Janowitz (6) state that children increased the total amount of time spent on mass media. Family viewing creates conflict between what adults enjoy, what children enjoy, and what the adults feel is proper for the children to receive in the form of mass media. The issue is usually resolved in the predictable way, with some qualms about the "effects" on the children. Adults with fewer children may be more likely to receive more mass communications as they can receive what they desire. In addition, more time may be available for receiving mass communications. However, even with one other person in the household there is conflict over the use of mass media. In the event that an individual elects to avoid receiving the programs someone else chooses she reduces her own amount of expected receiving time. This is particularly true for television viewing. This relationship will be examined in empirical hypothesis 5. The body of theory does not give sufficient information to allow prediction of direction.

E.H. 5 Number of people residing together will be related to the daily minutes of time spent receiving mass communication media messages.

Education

Berelson and Janowitz (6), MacLean (37), and Schramm (48) state that

media use increased with education. The lower class viewer is more likely to listen to radio or watch television, while the upper class viewer is more likely to read. Hence, the total amount of exposure to mass media may be greater for the higher status-role individual. However, while educated people may read more they may have other activities they engage in rather than watching television or listening to radio, lessening the amount of time they spend receiving mass communication messages. This relationship will be examined in empirical hypothesis 6. The body of theory does not give sufficient information to allow prediction of direction.

E.H. 6: Years of formal education will be related to the daily minutes of time spent receiving mass communication media messages.

An individual's status-role may demand that he be interested in certain types of messages from mass media. Based on the theoretical orientation it seems valid to expect the various attributes of an individual to be related to the types of messages he receives from mass communication media. Therefore, the following general hypothesis and resultant empirical hypotheses are formulated.

General Hypothesis 2: There will be a relationship between status-role orientation and the type of messages received from mass communication media.

The summated score of the five status-role indices will be combined with the variable type of exposure to mass media messages to formulate empirical hypothesis 7 as follows:

Status-role orientation - type of exposure

E.H. 7: The status-role orientation (composite score) will be related to the entertainment/information-orientation score.

The body of theory does not give sufficient information to allow prediction of direction.

In addition, each of the five status-role orientation indices was associated with the variable type of exposure to formulate five empirical hypotheses.

Farm size

A large farm may indicate certain management problems and need for technical knowledge. Social status may require knowledge about crops, markets, and other matters. It is more likely that an operator of a large farm will listen more to information-orientation programs than to entertainment programs. Since the farmer may be too involved in management and farm operations the wife may be required to have more exposure to mass media information-orientation programs. However, the time involved in management of a large farm may leave little time for receiving mass media messages of any type. The social status of an operator of a large farm may require knowledge about crops and markets, but this is a small percentage of the mass media messages sent. Even a small amount of entertainment type messages would offset the information-orientation type. This relationship will be examined in empirical hypothesis 8. The body of theory does not give sufficient information to allow prediction of direction.

E.H. 8: Number of acres operated will be related to the entertainment/information-orientation score.

Gross income

To successfully run a farm and achieve a high income requires information and knowledge. A farm family needs to know crop reports, market reports, weather reports, and technological knowledge. In some cases the farmer cannot listen to the reports so the wife may be required to receive the information. It is more likely that an individual with high income will listen to information-orientation programs rather than entertainment programs. Although the successful operation of a farm requires technical knowledge and information, the farm family may prefer to receive that information directly from experts in the field or from sources other than mass media. This relationship will be examined in empirical hypothesis 9. The body of theory does not give sufficient information to allow prediction of direction.

E.H. 9: Gross income will be related to the entertainment/information-orientation score.

Age

Cauter and Downham (14) and Schramm (48) state that media use tends to increase from childhood on. Along with increased use older people tend to choose more "serious" programs. Younger women are more likely to have children who want to listen to children's programs and the mother may not be able to receive what she chooses. However, the status of

older people may have associated with it behavior expectations that, if followed, would keep old people out of normal adult activity. When a person is believed to be old, he will be treated as such by others regardless of his physical, psychological, and social age. It is suggested that when an individual reaches old age he loses his position or status. Therefore, an older person will not be required to listen to information-orientation programs to maintain status. This relationship will be examined in empirical hypothesis 10. The body of theory does not give sufficient information to allow prediction of direction.

E.H. 10: Age will be related to the entertainment/information-orientation score.

Family size

The more people living together the greater the conflict over what program to receive. If there are children in the family they will likely want to listen to entertainment type of programs. It is often difficult to insist upon receiving an information-orientation type program if no one else in the family wishes to listen to it. Competition for use of the family television or radio set may result in it being moved to a recreation room. Frequently this room is located in the basement of the house or in some "out of the way" room. The additional effort involved in competing for the use of the set when in such a room might discourage a farm wife from listening to information-orientation programs. This relationship will be examined in empirical hypothesis 11. The body of theory does not give sufficient information to allow prediction of direction.

E.H. 11: Number of people residing together will be related to the entertainment/information-orientation score.

Education

Schramm and White (49) state that less educated groups use all mass communications more generally for entertainment and sensation, less generally for information and opinion. While the higher educated individual may watch television for entertainment he has other sources of information available to him. It is more likely that the higher status individual will select information-orientation messages from what is available. However, the higher status individual may prefer to receive information-orientation messages from sources other than mass media, and the overall measure may not be affected. This relationship will be examined in empirical hypothesis 12. The body of theory does not give sufficient information to allow prediction of direction.

E.H. 12: Years of formal education will be related to the entertainment/information-orientation score.

FINDINGS

Introduction

In the two preceding chapters, the general level hypotheses have been derived, measures designed to operationalize the concepts interrelated by these hypotheses have been described, and the empirical hypotheses were formulated. In this chapter the empirical hypotheses will be tested for statistical significance. Inferences concerning the validity of the general and empirical hypotheses will be made from the statistical tests.

The format which will be followed in this chapter will be to: (1) restate the general hypotheses, (2) restate the various empirical hypotheses in the null form (denoted as N.H.), and (3) report the results of the relevant statistical test of the data related to each empirical hypothesis. A summary and interpretation of the results of the tests of the empirical hypotheses will be given.

Statement and Tests of Hypotheses

The general objective of this thesis is to study the relationship between the social and economic attributes of Iowa farm women and their mass media communication patterns.

First general hypothesis

General Hypothesis 1: There will be a relationship between status-role orientation and the amount of time spent receiving

messages from mass communication media.

As discussed in the Methodology chapter, status-role orientation is measured by summing the five indices of farm size, gross income, age, family size, and education. The summated score of the transformed scale values of these status-role indices was correlated with the variable amount of time involved in receiving mass communications. In addition each of the five indices was associated with the variable amount of time, forming six empirical hypotheses which are stated in the null form in this chapter.

Status-role orientation - time exposure to mass media

N.H. 1: The status-role orientation (composite score) will not be related significantly to the daily minutes of time spent receiving mass communication media messages.

The computed coefficient of correlation is -.1152 which is less than the .159 value needed for these data with 145 degrees of freedom to be significant statistically at the .05 level of probability. These data do not support the original proposition. Several possibilities exist to explain this lack of theoretically expected relationship. The possibility exists that the method of aggregating and summing status-role orientation reduced variability from the raw data scores. This possibility cannot be overlooked nor can the method of aggregating the total number of minutes into a single listening score. Either method of aggregating scores could fail to reveal significant relationships with individual indices contained in the summated status-role orientation score. An

examination for individual significant relationships follows as each of the five status-role orientation variables are examined with the variable time.

Farm size

N.H. 2: Number of acres operated will not be related significantly to the daily minutes of time spent receiving mass communication media messages.

The computed coefficient of correlation is -.0783 which is less than the .159 value needed for these data with 145 degrees of freedom to be significant statistically at the .05 level of probability. These data do not support the original proposition.

There is a possibility that the relationship between farm size and time spent receiving mass media messages may need to be recast into a hypothesis that farm size is related to exposure to information-orientation programs rather than entertainment type programs. This possibility is examined in the empirical hypotheses derived from General Hypothesis 2 relating status-role orientation to type of exposure (information-orientation versus entertainment).

Gross income

N.H. 3: Gross income will not be related significantly to the daily minutes of time spent receiving mass communication media messages.

The computed coefficient of correlation is -.1298 which is less than

the .159 value needed for these data with 145 degrees of freedom to be significant statistically at the .05 level of probability. These data do not support the original proposition.

There is a possibility that the relationship between gross income and time spent receiving mass media messages may need to be recast into a hypothesis that gross income is related to exposure to information-orientation programs rather than entertainment type programs. This possibility is examined in the empirical hypotheses derived from General Hypothesis 2 relating status-role orientation to type of exposure.

Age

N.H. 4: Age will not be related significantly to the daily minutes of time spent receiving mass communication media messages.

The computed coefficient of correlation is -.1170 which is less than the .159 value needed for these data with 145 degrees of freedom to be significant statistically at the .05 level of probability. These data do not support the original proposition.

There is a possibility that the relationship between age and time spent receiving mass media messages may need to be recast into a hypothesis that age is related to exposure to information-orientation programs rather than entertainment type programs. This possibility is examined in the empirical hypotheses derived from General Hypothesis 2 relating status-role orientation to type of exposure.

Family size

N.H. 5: Number of people residing together will

not be related significantly to the daily minutes of time spent receiving mass communication media messages.

The computed coefficient of correlation is -.0097 which is less than the .159 value needed for these data with 145 degrees of freedom to be statistically significant at the .05 level of probability. These data do not support the original proposition.

There is a possibility that the relationship between family size and time spent receiving mass media messages may need to be recast into a hypothesis that family size is related to exposure to information-orientation programs rather than entertainment type programs. This possibility is examined in the empirical hypotheses derived from General Hypothesis 2 relating status-role orientation to type of exposure.

Education

N.H. 6: Years of formal education will not be related significantly to the daily minutes of time spent receiving mass communication media messages.

The computed coefficient of correlation is .0717 which is less than the .159 value needed for these data with 145 degrees of freedom to be significant statistically at the .05 level of probability. These data do not support the original proposition.

There is a possibility that the relationship between education and time spent receiving mass media messages may need to be recast into a hypothesis that education is related to exposure to information-

orientation programs rather than entertainment type programs. This possibility is examined in the empirical hypotheses derived from General Hypothesis 2 relating status-role orientation to type of exposure.

Second general hypothesis

General Hypothesis 2: There will be a relationship between status-role orientation and the type of messages received from mass communication media.

As in the previous section, the summated score of the five status-role indices was correlated with the variable of type of mass communication messages received. Also each of the five indices was correlated separately with the variable type, forming six empirical hypotheses. Type of messages received is measured by the ratio of minutes of entertainment program listening to minutes of information-orientation program listening.

Status-role orientation - type of exposure

N.H. 7: The status-role orientation (composite score) will not be related significantly to the entertainment/information-orientation score.

The computed coefficient of correlation is .1102 which is less than the .159 value needed for these data with 145 degrees of freedom to be significant statistically at the .05 level of probability. These data do not support the original proposition. The failure to support this theoretically expected relationship may be explained by several

possibilities. The possibility exists that the method of aggregating and summing status-role orientation reduced variability from the raw data scores. This possibility cannot be overlooked nor can the method of aggregating the total number of minutes into a single listening score. Either method of aggregating scores could fail to reveal significant relationships with individual indices contained in the summated status-role orientation score. An examination for individual significant relationships follows as each of the five status-role orientation variables are examined with the variable type.

Farm size

N.H. 8: Number of acres operated will not be related significantly to the entertainment/information-orientation score.

The computed coefficient of correlation is -.0390 which is less than the .159 value needed for these data with 145 degrees of freedom to be significant statistically at the .05 level of probability. These data do not support the original proposition.

Gross income

N.H. 9: Gross income will not be related significantly to the entertainment/information-orientation score.

The computed coefficient of correlation is .0412 which is less than the .159 value needed for these data with 145 degrees of freedom to be significant statistically at the .05 level of probability. These data do not support the original proposition.

Age

N.H. 10: Age will not be related significantly to the entertainment/information-orientation score.

The computed coefficient of correlation is .0421 which is less than the .159 value needed for these data with 145 degrees of freedom to be significant statistically at the .05 level of probability. These data do not support the original proposition.

Family size

N.H. 11: Number of people residing together will not be related significantly to the entertainment/information-orientation score.

The computed coefficient of correlation is .0573 which is less than the .159 value needed for these data with 145 degrees of freedom to be significant statistically at the .05 level of probability. These data do not support the original proposition.

Education

N.H. 12: Years of formal education will not be related significantly to the entertainment/information-orientation score.

The computed coefficient of correlation is .0360 which is less than the .159 value needed for these data with 145 degrees of freedom to be significant statistically at the .05 level of probability. These data do not support the original proposition.

Summary and Conclusions

The previous chapters included the development of a conceptual framework with its theoretical orientations. Theoretical concepts were developed in a logical procedure to serve as a guide for the remainder of the study.

The general objective was to explore the social and economic attributes in relation to the mass communication media use patterns of Iowa farm women. "Social and economic attributes" were considered to be one concept and "mass communication media use patterns" were considered to be the other concept. Both of these concepts were viewed as requiring explication. As a result, two general level hypotheses were developed with status-role orientation being considered as one concept and time spent receiving messages from mass communication media and types of messages received being considered the two concepts to be related to status-role orientation. In turn, empirical measures were developed to operationalize the three concepts. The measures were related by 12 empirical hypotheses. An attempt is made in this thesis to examine the strength of relationship between the variables.

The research sample consisted of 147 Iowa farm wives selected by means of random sampling procedures from the farm populations of seven Iowa counties throughout the state. Specified qualifications included being the principal operator of at least a 40 acre farm, married and living with husband, and having a radio set in working condition in the home, or elsewhere on the farm.

A four stage data collection procedure was followed. Information was obtained on each farm family during the initial sample qualification contact, from a personal interview, radio and video charts completed over a two-day period, and from radio and television logs.

The first general level hypothesis was: There will be a relationship between status-role orientation and the amount of time spent receiving messages from mass communication media. Six empirical hypotheses utilizing the five indices of status-role orientation, the summated score of status-role orientation, and amount of time spent receiving mass communications were formulated. Upon analyzing the data it was found that none of the hypotheses were significant at the .05 level of probability. In addition, no apparent trends were observed.

The second general level hypothesis was: There will be a relationship between status-role orientation and the type of messages received from mass communication media. Six empirical hypotheses utilizing the five indices of status-role orientation, the summated score of status-role orientation, and type of messages received from mass communications were formulated. Upon analyzing the data it was found that none of the hypotheses were significant at the .05 level of probability. In addition, no apparent trends were observed.

The theoretical rationale used seemed to be logical and sound. Since there is no significant statistical support for any of the empirical hypotheses it is concluded that the two general hypotheses were not supported.

There may be three possible explanations for the failure of the data to support the hypotheses. Either (1) the five indices of farm size, gross income, age, family size, and education do not measure status-role orientation; or (2) status-role orientation does not affect the amount of time spent receiving mass communication media and types of mass communication messages received; or (3) the methodology used in developing the status-role orientation indices reduced variance so that significant correlation could not be produced.

SUGGESTIONS FOR FURTHER RESEARCH

When a theoretical model is used to guide an analysis of behavior it is believed that the researcher will be able to more efficiently and effectively evaluate the significance of past related studies and to utilize it in making judgments concerning his own empirical research. It is concluded that the findings of this research do not support the general model and theoretical orientation.

The sample of 147 Iowa farm women may be an unusually homogeneous population. In instances where the sample members are quite similar other measures which have been refined to differentiate among the individuals will not do so. In addition, the women were required to be married, adding another homogeneous characteristic to the sample. It is suggested that further research include nonfarm areas and individuals who are single. Such a heterogeneous sample would be better suited for testing the conceptual framework of this research.

The sample members recorded their radio listening and television viewing patterns on charts for a two-day continuous period. The two-day period was rotated throughout the week so all days were taken into account. On any given day 42 women out of the total 147 recorded their mass communication behavior patterns. In view of the probable variation in an individual's behavior during a two-day span of time, it is recommended that future research obtain listening and viewing information from each individual for at least one week. The effect of any one day of unusual activity would not seriously affect the validity of the prediction.

The concept of family size was measured by the total number of individuals living in the household. Since the research design required the sample member to be married the smallest family unit was two individuals. The size of the group is germane to one's mental and physical activity. However, the effect of physical numbers will vary depending upon other conditions, such as the age and sex distribution of the group members. Future research might take these two factors into consideration.

Gross income was used as a measure of status-role orientation. The financial returns of a farm may depend on uncertain factors, such as the weather, sale prices, etc., and may fluctuate from year to year. It is recommended that in future research an average income for several years could improve the reliability of income as a predictor. One's form of leisure time activity at a given time is affected by his financial situation at that time. However, economic status over time is probably more influential in determining general behavior patterns concerning radio and television programs. One's total investment in his business might also be utilized.

Another factor that might be considered is number of organizations a woman belongs to. However, sheer number is not enough. There needs to be developed a measure of intensity of activity--how many meetings does she attend? What other types of organizational activities (other than meetings) is she involved in? How frequent? An individual who has many activities outside the home will not have the time available for receiving mass media communications.

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